TABLE 3. Comparison of elemental concentrations in 30 sediment samples from the Pamlico River estuary with 3 samples obtained from NOAA for Jones Bay (NSTP, 1987). Data from both Jones Bay and Pamlico River listed below, except total digestion data on Jones Bay samples (*) which are from NSTP (1987), were analyzed on the same equipment utilized in the present study and compare the partial extraction procedure (2N nitric acid) utilized within this report with a total digestion procedure ($H_2O_2$, $HNO_3$, and HF) as utilized in the NSTP (1987) study. The data in this table were obtained from an ongoing study concerning the "Partitioning of Heavy Metals in Sediments of the Pamlico River Estuary, North Carolina" by Richard Moore (in prep.).

| | PAMLICO RIVER MEAN (ug/g) | | | JONES BAY MEAN (ug/g) | | |
|---|---|---|---|---|---|---|
| ELEMENT | PARTIAL EXTRACTION | TOTAL DIGESTION | % REC BY PART EXTR | PARTIAL EXTRACTION | *TOTAL DIGESTION | % REC BY PART EXTR |
| CRITICAL TRACE ELEMENTS: | | | | | | |
| Be | 0.8 | 1.6 | 50 | 0.5 | 1.5 | 33 |
| Cd | 0.9 | 1.7 | 53 | 1.5 | 2.5 | 60 |
| Co | 5.8 | 18.9 | 31 | 5.2 | 15.0 | 35 |
| Cr | 25.3 | 72.2 | 35 | 12.9 | 66.2 | 19 |
| Cu | 29.8 | 38.2 | 78 | 46.1 | 66.4 | 69 |
| Li | 5.5 | 35.2 | 16 | 10.6 | 39.1 | 27 |
| Mn | 120.4 | 194.0 | 62 | 167.8 | 358.3 | 47 |
| Mo | 0.8 | 2.6 | 31 | 3.7 | 6.9 | 53 |
| Ni | 6.6 | 15.1 | 44 | 10.3 | 15.2 | 68 |
| Pb | 47.2 | 66.9 | 71 | 161.0 | 177.9 | 91 |
| Ti | 38.2 | 4,365.8 | < 1 | 106.1 | 3,209.5 | 3 |
| V | 24.2 | 86.4 | 28 | 27.9 | 85.9 | 32 |
| Zn | 201.3 | 233.8 | 86 | 261.5 | 313.7 | 83 |
| MAJOR ELEMENTS: | | | | | | |
| Al | 11,431.2 | 64,006.0 | 18 | 3,928.7 | 51,294.3 | 8 |
| Fe | 13,153.1 | 32,338.7 | 41 | 16,640.9 | 37,322.9 | 45 |
| K | 570.7 | 5,750.8 | 10 | 1,624.7 | 14,049.9 | 12 |
| Mg | 2,228.8 | 4,040.2 | 55 | 4,950.9 | 9,291.5 | 53 |
| Na | 3,609.2 | 5,216.3 | 69 | 9,825.7 | 14,348.4 | 68 |
| Si | 1,967.3 | 189,699.0 | 1 | 1,473.1 | 154,412.0 | 1 |